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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,523	07/01/2003	Kent Bryant Pfeifer	DN2003098	4449

7590 07/26/2004

The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
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Akron, OH 44316-0001

EXAMINER

DAVIS, OCTAVIA L

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/611,523

Applicant(s)

PFEIFER ET AL.

Examiner

Octavia Davis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 12-14 and 17 is/are rejected.
- 7) ☒ Claim(s) 4, 7-11, 15, 16 and 18-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 12, 13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylot.

Regarding claims 1, 2 and 17, Taylot discloses sensors for measuring shear and normal forces exerted on body tissues comprising a pad 101 having a lower electrode 112, an upper electrode 114 repositionable relative to the lower electrode in at least one direction responsive to the applied forces from the object body and means 100, 110 for measuring the applied forces within the object body by measuring the movement of the upper mat plane relative to the lower mat plane (See Col. 6, lines 20 – 36 and Col. 10, lines 11 – 43 and 53 – 56, Figs. 14 and 15).

Regarding claim 5, the pad 101 comprises a dielectric body (See Col. 4, lines 51 – 56 and Col. 10, lines 53 – 56).

Regarding claim 12, a sensor array 90 includes force-sensing components 60, each component having a pad 61, 62 which include a lower plane and an upper plane (See Col. 9, lines 19 – 38, Fig. 9).

Regarding claim 13, the pads 61, 62 comprise a dielectric body.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylot in view of Mohaupt.

Regarding claims 3, 6 and 14, Taylot discloses all of the limitations of these claims except for teachings that the lower electrode is capacitively coupled to an interrogation source, the capacitance between the lower electrode and the interrogation source changing responsive to a change in position between the mat upper electrode and the mat lower electrode.

However, Mohaupt discloses a capacitance weighing mat with substantially rigid separators comprising a lower electrode 6 is connected to a capacitive mat 1 and a transmission source 16, 18 (Col. 3, lines 29 – 36) and the capacitance change responsive to a change in position between an upper electrode 2 and the lower electrode 6 (See Col. 4, lines 1 – 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify according to the teachings of for the purpose of, providing a capacitive transducer mat including adjacent bending electrode plates in synchronous opposition over a plurality of substantially rigid dielectric separators to create a plurality of areas of closer proximity between the plates to effect capacitance changes (See Mohaupt, Col. 1, lines 45 – 52).

Allowable Subject Matter

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5. Claims 4, 7 – 11, 15, 16 and 18 – 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Taylor (6,216,545) discloses a method and apparatus for measuring pressures exerted on human feet.

Kuhn et al (3,782,486) teach a device for sensing and measuring a transient load.

Bullis et al (5,535,626) teach a silicon capacitive microsensor which is sensitive to acceleration forces including a silicon capacitive sensing element.

Mohaupt (6,006,386) teaches a capacitive transducer for use in measuring loads.

Kolesar (5,760,530) teaches a force magnitude and force pattern responsive tactile sensing apparatus.

Hopf et al (5,499,541) teach a piezoelectric force sensor.

Goldman (5,775,332) teaches a pressure pad feedback device.

Fullen et al (5,678,448) teach a system for continuously measuring forces applied by the foot.

Thornburg (4,177,421) teaches a capacitive transducer.

7. Any inquiry concerning this communication should be directed to examiner Octavia Davis at telephone number (571) 272 - 2176. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

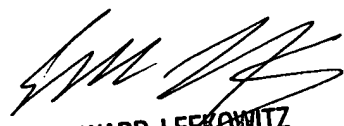
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supervisor, Edward Lefkowitz, can be reached on (571) 272 - 2180. The fax phone number for the organization where this application where this application or proceeding is assigned is (703) 872 - 9306.



OD/2855

7/21/04



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
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